

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE TRAFFIC SIGNAL AT THE INTERSECTION OF MD 177 (MOUNTAIN ROAD) AT MD 100 (PAUL T. PITCHER MEMORIAL HIGHWAY) IN ANNE ARUNDEL COUNTY. THE SIGNAL WILL BE UPGRADED TO FULL SIGNAL CONTROL. LED VEHICULAR TRAFFIC SIGNALS AND VIDEO DETECTION WILL BE INSTALLED.

MD 177 IS ASSUMED TO RUN IN AN EAST-WEST DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA TWO PHASE, FULLY-ACTUATED TRAFFIC MODE WITH EXCLUSIVE LEFT TURN PHASING FOR WESTBOUND MD 177.

CONTROLLER REQUIREMENTS

THE EXISTING POLE MOUNTED CABINET, CONTROLLER AND ASSOCIATED HARNESSSES SHALL REMAIN. THE SHA SIGNAL SHOP WILL INSTALL ONE (1) VIDEO DETECTION INTERFACE EQUIPMENT WITHIN THE CABINET.

THE CONTACT PERSONS FOR DISTRICT #5 / OOTS:

District #5

Ms. Kimberly Tran  
Assistant District Engineer - Traffic  
Phone: 410-841-1019

Mr. Mike Huber  
District Utility Engineer  
Phone: 410-841-1039

Mr. John S. Mays  
Assistant District Engineer - Maintenance  
Phone: 410-841-1013

Mr. James Folden  
Assistant District Engineer - Construction  
Phone: 410-841-1031

Office Of Traffic & Safety

Mr. Richard L. Doff Sr.  
Chief, Traffic Operations Division  
Phone: 410-787-7630

Mr. Robert Snyder  
Assistant Division Chief, Traffic Operations  
410-787-7630

Mr. Edward Rodenhizer  
Team Leader Signal Operations  
Phone: 410-787-7630

Mr. Eugene Bailey  
Team Leader Sign Operations  
410-787-7670

The Power Company Representative Is:  
Baltimore Gas & Electric Company  
7317 Parkway Drive South  
Hanover, Maryland  
Phone: 410-859-9062

EQUIPMENT LIST 'A'

EQUIPMENT TO BE FURNISHED BY THE SHA.

ITEM NO.	QUANTITY	DESCRIPTION
9086	1 EA	VIDEO DETECTION INTERFACE EQUIPMENT: 1-2 CAMERAS
9570	7 SF	SHEET ALUMINUM GROUND MOUNTED SIGN:  1 EA - R1-1 (30 IN. x 30 IN.)
9571	24 SF	SHEET ALUMINUM MAST ARM/ POLE MOUNTED SIGN:  1 EA - M1-5(6) (48 IN. x 72 IN.) "WEST, MD 100, LEFT ARROW"

EQUIPMENT LIST 'C'

EQUIPMENT TO BE REMOVED AND RETURNED TO SHA.

ITEM NO.	QUANTITY	DESCRIPTION
----------	----------	-------------

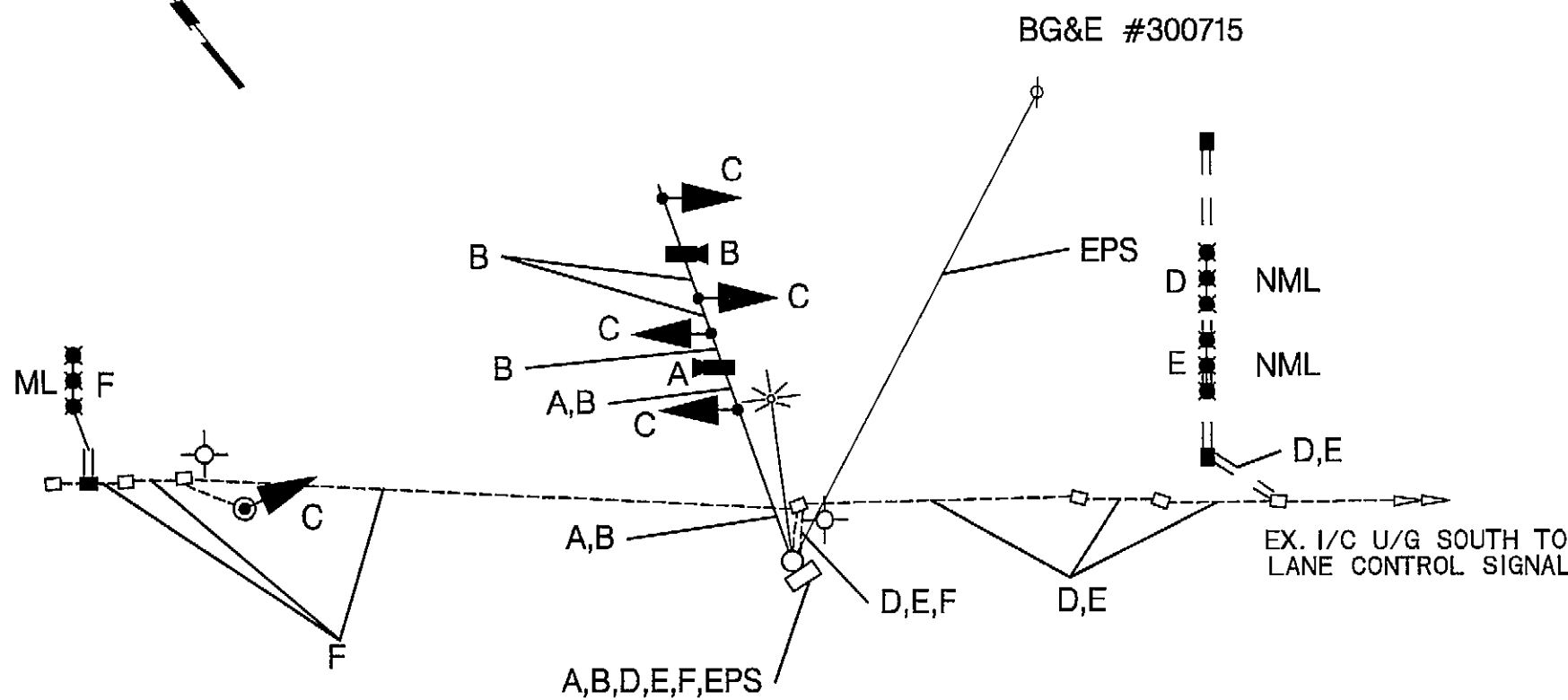
NONE - ALL REMOVED EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

EQUIPMENT LIST 'B'

EQUIPMENT TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR.

ITEM NO.	QUANTITY	DESCRIPTION
1003	1 EA	MAINTENANCE OF TRAFFIC PER ASSIGNMENT
5001	25 LF	REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS - ANY WIDTH
5005	55 LF	24 INCH WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS
8001	12 EA	12 INCH LED SIGNAL HEAD SECTION
8017	3 EA	LED SIGNAL HEAD MODULES (ANY SIZE)
8022	1 EA	MICROLOOP PROBE (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8023	2 EA	NONINVASIVE DETECTOR (ANY LENGTH) LEAD IN CABLE UP TO 1000'
8024	1 EA	REMOVE & DISPOSE OF MATERIAL & EQUIPMENT PER ASSIGNMENT
8028	2 EA	VIDEO DETECTION CAMERA & CABLE
8029	8 LF	1 INCH DETECTOR SLEEVE GALVANIZED OR FLEXIBLE LIQUID TIGHT
8034	75 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
8036	80 LF	UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8038	36 SF	INSTALL OVERHEAD OR GROUND MOUNTED SIGN (INCLUDING ALL HARDWARE)
8044	3 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
8057	25 LF	SAW CUT FOR SIGNAL (LOOP DETECTOR)

WIRING DIAGRAM



A - CONTROL CABLE - 250 FT., VIDEO  
B - DETECTION CAMERA TO CONTROLLER

C - USE EXISTING CABLE

D - NON-INVASIVE DETECTOR  
E - 1000 FT. LEAD-IN CABLE

F - MICROLOOP PROBE DETECTOR  
1000 FT. LEAD-IN CABLE

EPS - EXISTING POWER SERVICE

EXISTING GROUND ROD -  
3/4 IN. DIAMETER X 10  
FOOT LENGTH

NML - NON-INVASIVE MICROLOOP PROBE SET

ML - MICROLOOP PROBE SET

PHASE CHART

	1	2	3	4	5	
	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	(R) (Y) (G)	
PHASE 1	R	R	←G←	←G←	←G←	
PHASE 1 CHANGE	R	R	←Y←	←Y←	←Y←	↓
PHASE 2	G	G	←R←	←R←	←R←	
PHASE 2 CHANGE	Y	Y	←R←	←R←	←R←	→
FLASHING OPERATION	FL/Y	FL/Y	FL/RA/FL/RA	FL/RA/FL/RA	FL/RA/FL/RA	↕

SHA

STATE OF MARYLAND  
DEPARTMENT OF TRANSPORTATION  
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY  
TRAFFIC ENGINEERING DESIGN DIVISION

MD 177 (MOUNTAIN ROAD)

AT MD 100 (PAUL T. PITCHER MEMORIAL HIGHWAY)  
PASADENA, MARYLAND

GENERAL INFORMATION

SCALE: NONE ADVERTISED DATE: 10/2010 CONTRACT NO.: XX3636168

DESIGNED BY: MCG COUNTY: ANNE ARUNDEL

DRAWN BY: MCG LOGMILE: 02017705.07

CHECKED BY: MTS TMS NO.: K256

F.A.P. NO.: TOD NO.:

TS NO. 4483-A-G1 DRAWING: SG-02 OF 02 SHEET NO. 02 OF 02